



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/765,210	01/28/2004	Graham Williams	14966.0002	7638

27890 7590 04/19/2007
STEPTOE & JOHNSON LLP
1330 CONNECTICUT AVENUE, N.W.
WASHINGTON, DC 20036

EXAMINER

WEINSTEIN, STEVEN L

ART UNIT	PAPER NUMBER
----------	--------------

1761

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/19/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 10/765,210.	Applicant(s) WILLIAMS ET AL.	
	Examiner Steven L. Weinstein	Art Unit 1761	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 January 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 14-20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Claims 1-6 and 8-13 are rejected under 35 U.S.C. 102(e) as being anticipated by Tangprasertchai et al (7,014,878), for the reasons fully and clearly given in the Office action mailed 10/30/06.

Claims 1-13 are rejected under 35 U.S.C. 103(a) (based on 102(e)) as being unpatentable over Tangprasertchai et al (7,014,878), further in view of Malkki (3,996,386), applicants' admission of the prior art, Kaplow et al (3753,734), Glasser et al (3,655,404), Melnick (3,021,219), Coleman et al (6,210,723), Apicella et al (5,409,717), Cha et al (5,225,222), and the Encyclopedia of Food Technology (Johnson et al, 1974), for the reasons fully and clearly given in the Office action mailed 10/30/06.

All of applicants remarks filed 1/30/07 have been fully and carefully considered but are found to be totally unconvincing. The urging on page 6 of the response declares that Tangprasertchai et al does not disclose a non-yeast leavened "fine" bakery product...etc., despite the fact that the evidence in Tangprasertchai et al for the rejection, is specifically pointed out in the rejection. Tangprasertchai et al discoses that the baked product can have yeast and/or other leavening agents. Therefore Tangprasertchai et al discloses non-yeast leavened baked product. As for the issue of the product being an intermediate or high moisture baked product, Tangprasertchai et al discloses water activities from .8 to .94 which is certainly within the recited range. Taken with the fact that the moisture content is between 20 to 30 percent, the baked products of Tangprasertchai et al qualify as intermediate or high moisture baked products. Stated somewhat differently, if applicants' recited and disclosed products have been given this classification and the products of Tangprasertchai et al have the same properties, then

Art Unit: 1761

the products of Tangprasertchai et al must also be similarly classified. It is also noted that the word "fine" has not been given any particular significance in the specification and the phrase "and like baked products" certainly does not further clarify or limit the word. Note, too, and as emphasized in the last Office action, Tangprasertchai et al unequivocally discloses that the microbial inhibitor, which can be natamycin (also known as pimaricin), can be applied to the exterior surfaces of the baked product after baking. The response also urges that the rejection does not provide a basis in fact and/or technical evidence tending to show inherency. Contrary to what has been urged, the rejection did provide a basis in fact to support inherency. Claim 1 recites that the natamycin is in an effective amount, which is sufficient to keep the product mold free when packaged for a storage time of two weeks or more at ambient temperature. Tangprasertchai et al discloses the use of natamycin and other microbial inhibitors, which together with refrigerated temperature storage and modified atmosphere, enables the product to be stored for at least 3 months. Refrigeration and modified atmosphere, of course, extends storage life. However, since natamycin is a well known antimicrobial, employed for its well known and attested to properties, including the fact it is a strong antibacterial effective in small concentrations, two week storage at ambient would be an expected, inherent result, if one can achieve 3 month storage by adding refrigeration and modified atmosphere. The Office has no way of testing such things, but natamycin would not be much of an antimicrobial if it could not maintain a food surface preserved for 2 weeks at ambient temperature. It is also noted that regardless of the particular food product, the problem addressed by applicants and the art taken as a whole is the

problem of surface contamination of foods during or after processing, and the solution is to apply to the food surface, an antimicrobial, which can be the known and well attested to natamycin. It is also not clear what the response is urging. Is the response urging that one of ordinary skill in the art would not have expected that natamycin had the inherent ability to maintain the surface of a baked product preserved for 2 weeks at ambient conditions?

On page 7 of the response, it is not clear what the response is urging in terms of admissions of prior art. Is the response urging that there is no admission of prior art in the specification? If so, how does one characterize a statement such as the one found on page 2, para. 1, wherein it is disclosed that natamycin has been used for many years in a large number of countries throughout the world? In fact, paragraph 5 on page 1 of the specification appears to be essentially a paraphrasing of page 33 of the Encyclopedia of Food Technology, which was published in 1974, and presumably prior art and a bar under 35USC102. Similarly, when it is stated (page 1, para. 3 of the specification) that various methods have been adopted in an attempt to achieve the required shelf life for products prone to rapid spoilage such as cakes, waffles muffins, etc., is this a reference to prior art to applicants? Applicants are reminded of their Duty of Disclosure.

On pages 8-10 of the response, the references are argued as if they were applied separately, in a vacuum. The references are not applied separately under 35USC102, anticipation, but rather together under 35USC103, obviousness. The rejection states that even if the 35USC102 rejection (which includes an argument that

Art Unit: 1761

the natamycin is present in an amount which would inherently achieve the recited storage time for the recited storage conditions) could be successfully rebutted, the preponderance of the evidence taken as a whole would fairly lead one to modify Tangprasertchai et al and employ a sufficient amount of natamycin for at least two weeks at ambient temperature if one were willing to accept shorter storage times. As noted above, there appears to be nothing magic in the particular products to be provided with natamycin and stored. The art taken as a whole fairly teaches that any food product subject to surface contamination and mold growth can have its storage life extended by providing an antimicrobial on the surface. Malkki et al discloses the drawbacks of chemical preservatives; recognizes the problem of post-processing, microbial contamination; recognizes that the problem is essentially surface contamination; recognizes that the treatment can be just on the surface; treats the product, which can be baked products, subsequent to baking; stores the treated product, at 82.4F (which is ambient); treats bakery products containing 20% moisture; employs pimaricin as the antimicrobial; selects the preservative based on the microorganisms to be controlled; and recognizes that the effect of the preservative is increased by introducing modified gas atmospheres. Kaplow et al sprays products which can be waffles or pancakes with antimycotics; discloses the use of pimaricin as the antimycotic; discloses that the amount of antimycotic can be from .1-2.5% but in the case of pimaricin can be presenting even lower amounts such as 50ppm; recognizes that the amount of antimycotic is selected to give the results desired; notes that intermediate moisture food products have a moisture content between 10 and

Art Unit: 1761

substantially below 75%, such as 14-40%. Glasser et al has a similar disclosure to that of Kaplow et al and notes that the baked product such as French toast, sprayed or dipped with an antimycotic, which can be pimaricin, can be stored without refrigeration. Melnick also discloses spraying a baked product with an antimycotic and provides a product with 20% moisture. Thus, contrary to what has been urged, the art is all analogous, since it is all directed to the problem of food surface contamination and the application of antimycotics to increase storage time. The art taken as a whole fully and unequivocally provides the motivation for applying to any food subject to surface mold, and specifically baked products that are within the category intermediate or high moisture products with water activities within the recited range, an antimycotic, and specifically the notoriously well known antimycotic, pimaricin, in an amount which would enable the product to be stored at ambient temperature for 2 weeks or more. The art, taken as a whole, discloses that pimaricin is effective in very small amounts and the art attests to storage at ambient temperature of food surface treated with antimycotic. At best, the particular amount of pimaricin would have been an obvious result effective variable, routinely determinable, in view of the preponderance of the evidence.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

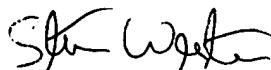
Art Unit: 1761

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven L. Weinstein whose telephone number is 571-272-1410. The examiner can normally be reached on Monday-Friday 7:00 A.M.-2:30 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton Cano can be reached on 571-272-1398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


STEVE WEINSTEIN
PRIMARY EXAMINER

1761

4/16/07